

AMENDMENTSIN THE SPECIFICATION:

Please replace the paragraph beginning on page 8, line 12 and ending on page 9, line 12, with the following paragraph:

Part B1

The illustrated charging inductor 26 is selected to provide a time constant that allows a capacitor charge time that satisfies, i.e., is less than, the pulse rate of the laser 16. For the illustrated system, for example, the charge time is approximately equal to $\pi^* \sqrt{L * C}$. Two resistors, R1 28 and R2 30, are connected in parallel with the capacitor 12 in a commonly known voltage divider configuration. A keep-up power supply 32 is also connected in parallel with the capacitor 12, and in an embodiment, the keep-up power supply 32 is a high voltage power supply, although the invention is not limited by the keep-up power supply 32 specifications, and any similarly functioning element as described herein, may therefore be substituted without departing from the invention. The power supply system 10 also includes a control module 34 that operates S1 20, S2 22, S3 24, and controls the operation of the keep-up power supply 32, and the main power supply 18. The illustrated control module 34 is not microprocessor based, however those skilled in the will recognize that the control processor may be a microprocessor based device, including for example, a personal computer (PC), SUN workstation, laptop or handheld computer including personal digital assistant (PDA), connected through a network or in a stand-alone capacity, and functioning as described herein, without departing from the scope of the invention. As FIG. 1 indicates, the control module 34 and the keep-up power supply 32 measure the voltage drop across R1 28. The remaining element of the power supply system 10 is a diode 36.

IN THE CLAIMS:

Please cancel claims 17-20, without prejudice. Accordingly, claims 1-16 are currently pending.